



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,917	02/03/2004	Arturo Mastelli	71312-0002	1695
35161	7590	04/25/2006	EXAMINER	
DICKINSON WRIGHT PLLC 1901 L. STREET NW SUITE 800 WASHINGTON, DC 20036				KATCHEVES, BASIL S
		ART UNIT		PAPER NUMBER
		3635		

DATE MAILED: 04/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/770,917	MASTELLI, ARTURO
Examiner	Art Unit	
Basil Katcheves	3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 17 February 2006.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1 and 3-21 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1 and 3-21 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: *Marked figure.*

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

**Claims 1 and 3-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 2,724,465 to Krauss et al in view of U.S. Patent No. 4,506,482 to Pracht et al. as in the previous office action.**

Regarding claims 1, Krauss discloses a curtain wall structure having a framework with a series of panels (fig. 6). Krauss also discloses an insulating panel (fig. 6: 42) being flush with the frame (fig 6: 50). Krauss also discloses an outer tile (fig. 6: U) which is secured to the insulating panel and to the frame. Krauss also discloses the panel as having a perimeter with an angled edge, the panel face and the edge comprise an L shaped cross section (see marked fig) and the edge is coupled to the frame (fig. 15: see panel edge in direct contact and coupled to the frame). However, Krauss does not disclose tiles adhered to the panels with silicone. Pracht discloses tiles adhered with silicon (column 1, line 50) to a building wall (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Krauss by adhering tiles in order to improve the aesthetics and make a better bond to the panel. Krauss also discloses the panels as having inherent edges located at the outer perimeter of the panels which aid in the rigidity of the panel.

Regarding claim 3, Krauss discloses the panels as being on the same plane as the front surface of the frame (fig. 6, see face of panel 42).

Regarding claim 4, Krauss discloses the use of fasteners to secure the panels to the frame (fig. 15: 99).

Regarding claim 5, Krauss discloses a gasket between the perimeter of the tiles and the frame (fig. 16: 115).

Regarding claim 6, Krauss discloses top and bottom retainers for securing the tiles to the frame (fig. 6: 40 & 48).

Regarding claim 7, Krauss discloses a seal between adjacent tiles (fig. 15: 116).

Regarding claim 8, Krauss discloses the size of the panels as being substantially the same as the size of the frame openings (fig. 6) and the tiles as being larger than the frame opening (fig 6: U compared to 42).

Regarding claims 9, Krauss in view of Pracht discloses the basic claim structure of the instant application but does not disclose specific thickness. It would have been an obvious design choice to vary the thickness of tiles and panels in order to decrease or increase the curtain wall weight and strength.

Regarding claim 10, Krauss discloses the panels as having an edge portion (marked fig. "angled edge portion") that has a rearward dimension that is greater than the thickness of the tile (fig. 6:U).

Regarding claim 11, Pracht discloses the use of ceramic tiles (column 2, line 53).

Regarding claim 12, Krauss in view of Pracht discloses the basic claim structure of the instant application but does not disclose specific dimensions. It would have been an obvious design choice to vary the widths of tiles and panels in order to decrease or increase the curtain wall weight and strength.

Regarding claims 13, Krauss discloses a curtain wall structure having a framework with a series of panels (fig. 6). Krauss also discloses a panel (fig. 6: 42) being flush with the frame (fig 6: 50) and substantially the same size as the frame openings. Krauss also discloses the panel as having an edge (marked fig) as extending normal to the plane of the front frame surface. Also, Krauss discloses the panel as having a perimeter with an angled edge (marked fig) and the edge is coupled to the frame (fig. 15: see panel edge in direct contact and coupled to the frame). The panel face and the angled edge forming an L shaped cross section (marked fig). Krauss also discloses an outer tile (fig. 6: U) which is secured to the insulating panel and to the frame. However, Krauss does not disclose tiles adhered to the panels with silicone. Pracht discloses tiles adhered with silicon (column 1, line 50) to a building wall (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Krauss by adhering tiles in order to improve the aesthetics and make a better bond to the panel.

Regarding claim 14, Krauss discloses the tiles as being larger than the openings and also discloses the panels as being connected to the frame along the perimeter (fig. 15: where 94 points). However, Krauss does not disclose the panels as being larger than the frame openings. Pracht discloses panels as being larger than frame openings (fig. 10: 67). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Krauss by using a panel of larger size than the opening, as disclosed by Pracht, in order to create a tighter, weather proof seal.

Regarding claims 15, Krauss discloses providing a curtain wall structure having a framework with a series of panels (fig. 6). Krauss also discloses the panel (fig. 6: 42) as being flush with the frame (fig 6: 50) and substantially the same size as the frame openings. Krauss also discloses the panel as having an edge (marked fig) as extending normal to the plane of the front frame surface. The panel face and the angled edge forming an L shaped cross section (marked fig). Krauss also discloses an outer tile (fig. 6: U) which is secured to the insulating panel and to the frame. However, Krauss does not disclose tiles adhered to the panels with silicone. Pracht discloses tiles adhered with silicon (column 1, line 50) to a building wall (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Krauss by adhering tiles in order to improve the aesthetics and make a better bond to the panel. Krauss does not specifically mention a light weight panel. However, the panel may be made "light weight" when made with a "light weight" aggregate.

Regarding claim 16, Krauss discloses the panel face (marked fig) as extending along a plane which is the same as or in front of the surface of the frame (marked fig).

Regarding claims 17 and 20, Krauss discloses the face of the panel as flush with the frame (fig. 6: see panel 42 flush with outer boundary of frame where 47 points).

Regarding claim 18 and 21, Krauss discloses the lightweight panel (42) as being made of any well known type of insulating material (column 4, lines 42-48), but does not particular disclose the use of aluminum. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use an aluminum backing foil to insulate the panel, as aluminum backed foils are commonly found on insulation

and are readily available at most hardware stores in the form of rFoil insulation products, Radiant Guard products, Aluma Foil, standard insulation foam backing, etc.

Regarding claim 19, Krauss discloses the use of nuts and bolts (marked fig 49) to couple the entire panel, edge included, to the frame.

### ***Response to Arguments***

Applicant's arguments filed 2/17/06 have been fully considered but they are not persuasive. Applicant argues that the panels of Krauss are not "support panels", they are insulation panels. The applicant should note that even though the panels of Krauss are insulation panels, they meet the structural limitations of the applicants support panels, as claimed. Applicant argues the "integral angled edge" of the claims. These limitations have been drawn out in the attached marked figure for a more clear presentation. However, the "angled edge" of the applicant is merely claimed as being normal to the front face. This limitation is merely an edge angled at 90 degrees from the front face. The applicant has added limitations in the recent amendment to further clarify the angled edge. However, as noted in the rejection above, the limitations added merely recite an L shaped cross section formed by the front face and the angled edge (the edge which extends at a normal angle from the face). These two edges, being at 90 degrees from each other naturally form an L shape. Applicant also argues that the panels of Krauss are not substantially secured within the frame. However, since the panels do not fall out of the frames, they may be considered as being secured to the frame. Applicant also argues that Krauss is not combinable with Pracht to teach

Ceramic tiles adhered to a facer. However, ceramic tiles are well known in the art as being adhered to facers. They are commonly adhered to walls, floors, counters, tables and many other surface. Pracht teaches an outer wall of a building having ceramic tiles adhered to it. Essentially, Krauss and Pracht teach the same concept of exterior cladding backed by frame members on a building wall. Applicant states that Krauss teaches away from adhering tiles to the panels, however, the applicant does not state any reasons for this. The applicant states that the examiner is using hindsight for attaching tiles to an outer wall. The applicant should know that tiles are commonly used for attaching to walls. This has been well known in the art of construction for thousands of years. The secondary reference of Pracht is used to further clarify the use of tiles on exterior framework.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 3635

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Basil Katcheves whose telephone number is (571) 272-6846. The examiner can normally be reached on Monday-Friday from 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Friedman, can be reached at (571) 272-6842.

BK 

4/18/06



Carl D. Friedman  
Supervisory Patent Examiner  
Group 3600

MARKED FIGURE  
FOR USE WITH  
APPLICATION  
10/770917

Nov. 22, 1955

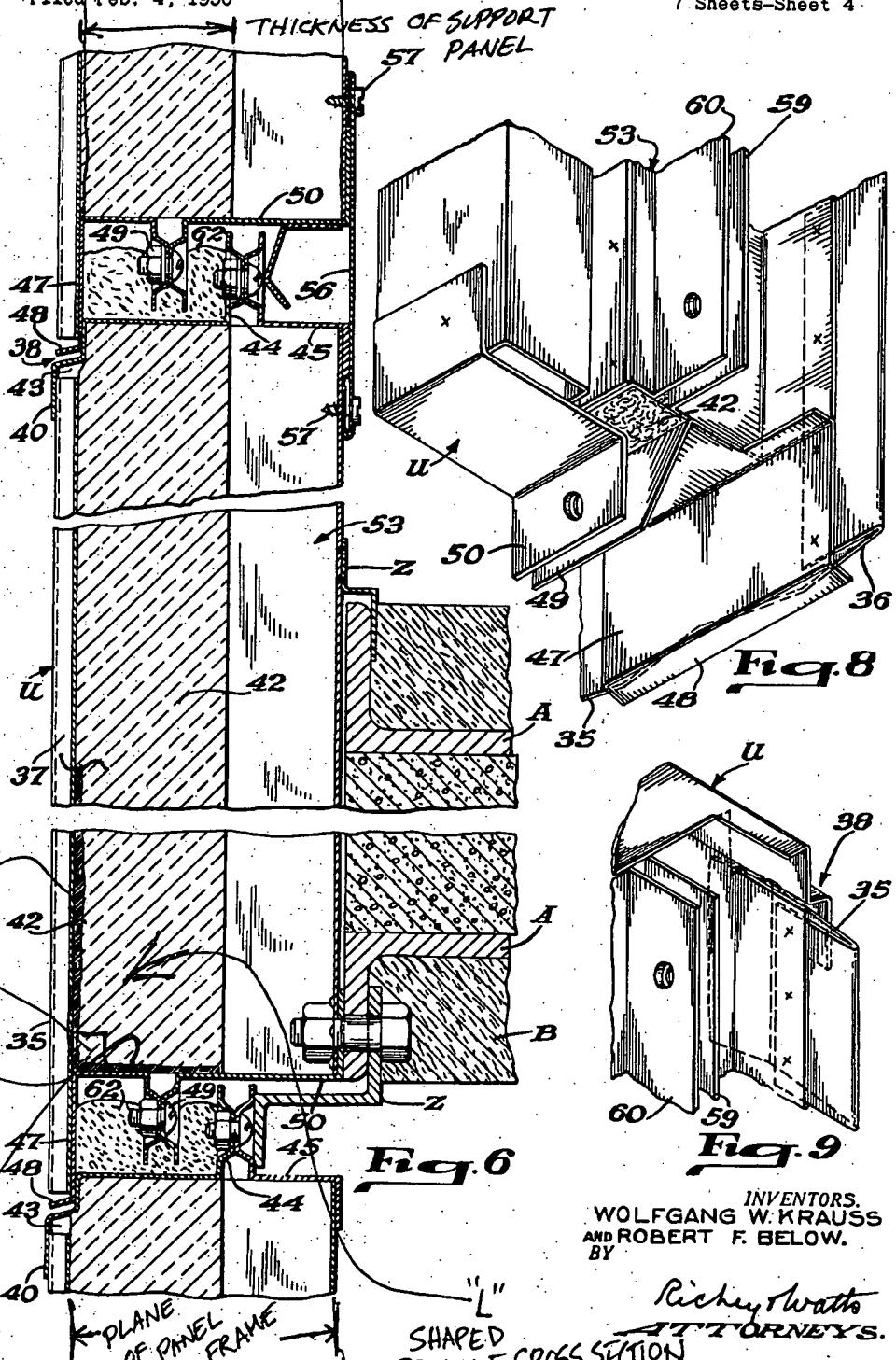
W. W. KRAUSS ET AL

2,724,465

PANEL AND CURTAIN WALL CONSTRUCTION

Filed Feb. 4, 1950

7 Sheets-Sheet 4



INVENTORS,  
WOLFGANG W. KRAUSS  
AND ROBERT F. BELOW.  
BY

Rickey Shatto  
ATTORNEYS.

ANGLES OF PANEL FACE  
AND ANGLED EDGE  
ARE NORMAL TO EACH OTHER

PANEL FACE  
AND ANGLED EDGE